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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/389,082	09/02/1999	STEPHEN PETER FITZGERALD	104161	4878
25944	7590	03/10/2006		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER CROSS, LATOYA I	
			ART UNIT 1743	PAPER NUMBER
DATE MAILED: 03/10/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/389,082

Applicant(s)

FITZGERALD ET AL

Examiner

LaToya C. Younger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-19 and 22-38 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17-19 and 22-38 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

This Office Action is in response to Applicants' remarks filed on November 23, 2005. Claims 17-19 and 22-38 are pending.

#### *Claim Rejections - 35 USC § 103*

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 17-19, 25, 27, 29, 31, 33, 35 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 4,828,386 to Matkovich et al.

Matkovich et al teach a device having a plurality of storage wells (20). In one embodiment of the reference, Matkovich et al teach a well having projections (72) on the inner surface of the well (figures 3b and 3c). The projections form a ring around the inner circumference of the well. Matkovich et al teach that the projection serves as a retaining ring. Matkovich et al further teach that inserts (40) may be inserted into the wells and used in assaying a sample for the presence of an analyte of interest. The inserts are substrates capable of binding antibody and other biological substances used in binding assays (col. 3, lines 52-55). Thus, the inserts are similar to Applicants' claimed "chips". Matkovich et al teach that the inserts may be cylindrical inserts with closed tops and bottom that reside on the bottom surface of the well (col. 7, lines 28-31; col. 9, lines 2-8). When in use, the inserts are located within the well (20) between the base and projection (72). See col. 10, lines 38-45. The reference shows figure 1 as containing multiple wells on a plate. Figure 3c of the reference shows well (20) having a tapered bottom and projection (72). With respect to the method of forming the wells containing chips, Matkovich et al teach that the multi-well plates may be formed by injection molding or other plastic

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forming process (col. 3, lines 34-38). The inserts are inserted into the wells and may be held in place by projections (72). See col. 8, lines 23-44.

Matkovich et al differ from the instant invention in that there is no disclosure of the projections being "hot or cold formed" and no disclosure of the projections being formed after the inserts/chips are placed in the well.

With respect to the projections being "hot or cold formed", Matkovich et al teach that the wells are made by conventional injection molding or other plastic forming processes. In such processes, it is convention to mold the structure of a device by using hot and cold molds. It would have been obvious to one of ordinary skill in the art to form the projections of Matkovich et al by using conventional hot and/or cold mold techniques as these techniques are commonly used, well-known processes for manufacturing plastic devices. See API Solution Glossary of Plastic Injection Molding Terms, which explains the process of cold molding and thermoforming as it relates to plastic injection molding techniques.

With respect to the projections being formed after the inserts/chips are inserted into the well, Matkovich et al teach using inserts that reside on the base of the well. Matkovich et al further teach that the projections (72) serve as a retaining means for retaining the inserts inside of the wells. It would have been obvious to one of ordinary skill in the art to form the projections after the inserts are placed within the wells so that the projections will properly hold the inserts in place.

With respect to claims 29 and 30, where a square base is recited, Matkovich et al teach that the wells may be cylindrical or any other hollow shape (col. 3, lines 38-45). It would have been obvious to one of ordinary skill in the art to make the base of the storage well any shape suitable to sufficiently hold the chips within the well.

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3. Claims 22-24, 26, 28, 30, 32, 34, 36 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over US patent 4,828,386 to Matkovich et al in view of McManus et al.

The disclosure of Matkovich et al is described above. With respect to claim 22 and its dependent claims, Matkovich et al fails to teach press-fitting the inserts into the wells.

McManus et al teach a magnet being held in a magnet carrier (similar to the chip being held in a storage well). In order to retain the magnet inside the magnet holder, McManus et al teach that during the injection molding process, the magnet is press-fitted to the holder in a frictional engagement. It would have been obvious to one of ordinary skill in the art to "press fit" the chips of Matkovich et al into the storage well to assure that the chips are properly retained.

#### *Response to Arguments*

4. Applicant's arguments with respect to the pending claims have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LaToya C. Younger whose telephone number is 571-272-1256. The examiner can normally be reached on Monday-Friday 10:30 a.m. - 8:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on 571-272-1267. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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MONIQUE T. COLE  
PRIMARY EXAMINER